

IN THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 17, with the following rewritten paragraph:

Heasley et al. ~~J. Am. Chem. Soc.~~, J. Org. Chem. 1988, pp. 198-201 have synthesized various iodinated organic substances by reacting tert-butyl hypoiodide with various ethylenically unsaturated substances, in the presence of BF_3 or under the action of ultraviolet radiation. In particular, they thus synthesized the substance of formula $(\text{CH}_3)_3\text{-C-O-CH}_2\text{-CH}\Phi\text{I}$, where Φ denotes a phenyl group.

Please replace the Abstract with the following rewritten Abstract:

Process for preparing one or more iodinated organic substances having a molecular mass of less than 2000 (substances (S)) using (A) at least one free-radical-generating substance chosen from peroxides, diazo compounds, dialkyldiphenylalkanes, substances derived from tetraphenylethane, boranes and iniferter substances comprising at least one thiuram disulphide group, (B) an ethylenically unsaturated substance capable of adding a free radical to its ethylenic double bond, (C) molecular iodine, which comprises the steps according to which at least a fraction of (A), at least a fraction of (B) and at least a fraction of (C) are introduced into a reactor, and then the contents of the reactor are caused to react, while introducing therein the possible remainder of (A), the possible remainder of (B) and the possible remainder of (C), until a moment is reached when the content of the reactor is a mixture comprising one or more substances (S). Iodinated organic substances for whose preparation the abovementioned process is particularly well suited.

A clean version of the Abstract is given at the end of this paper.